

NAVAL POSTGRADUATE SCHOOL

Monterey, California



THESIS

**ARE THERE COST EFFECTIVE
ALTERNATIVES TO
NAVY READY SUPPLY STORES?**

by

Barry J. Dowell

December, 1996

Thesis Advisor:

Kevin R. Gue

Approved for public release; distribution is unlimited.

19970527 057

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE December, 1996.		3. REPORT TYPE AND DATES COVERED Master's Thesis
4. TITLE AND SUBTITLE ARE THERE COST EFFECTIVE ALTERNATIVES TO NAVY READY SUPPLY STORES?			5. FUNDING NUMBERS	
6. AUTHOR(S) DOWELL, BARRY J.				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey CA 93943-5000			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.				
12a. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.			12b. DISTRIBUTION CODE	
13. ABSTRACT (maximum 200 words) This study presents two alternatives to the Navy's Ready Supply Store (RSS) to determine if there is a more cost effective means of performing their function while still providing the same level of customer support. The RSS is a means of providing supply support to remote site DoD customers for high demand, low cost consumable items needed for day to day operations. This study focuses on the RSS at the Naval Postgraduate School Monterey, CA. and examines two alternatives: a government-wide commercial credit card program and partnering with the nearest Fleet and Industrial Supply Center (FISC). We compare the cost of operations, sales price between government and local vendors, and customer preference. The results suggest that items are slightly less expensive when purchased at the School's RSS than at local vendors. However, the savings to the School in operations costs and to the Navy in Budget Project 28 funds, by eliminating the RSS, far outweigh the higher cost of purchasing items from local vendors. We also found that the same level of customer support could be provided if the NPS RSS were eliminated. As a result, we recommend eliminating the RSS at NPS and implementing the government-wide commercial credit card program.				
14. SUBJECT TERMS Ready Supply Store, Consumables, Inventory Management.			15. NUMBER OF PAGES 56	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UL	

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89)
Prescribed by ANSI Std. Z39-18 298-102

Approved for public release; distribution is unlimited.

**ARE THERE COST EFFECTIVE
ALTERNATIVES TO
NAVY READY SUPPLY STORES?**

Barry J. Dowell
Lieutenant, United States Navy
B.A., University of North Carolina at Charlotte, 1984

Submitted in partial fulfillment
of the requirements for the degree of

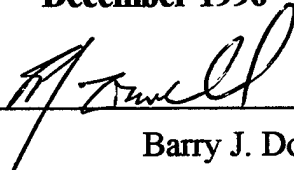
MASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL

December 1996

Author:

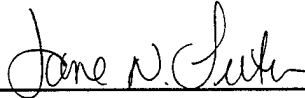


Barry J. Dowell

Approved by:



Kevin R. Gue, Principal Advisor



Jane N. Feitler, Associate Advisor



Reuben T. Harris, Chairman
Department of Systems Management

ABSTRACT

This study presents two alternatives to the Navy's Ready Supply Store (RSS) to determine if there is a more cost effective means of performing their function while still providing the same level of customer support. The RSS is a means of providing supply support to remote site DoD customers for high demand, low cost consumable items needed for day to day operations. This study focuses on the RSS at the Naval Postgraduate School Monterey, CA. and examines two alternatives: a government-wide commercial credit card program and partnering with the nearest Fleet and Industrial Supply Center (FISC). We compare the cost of operations, sales price between government and local vendors, and customer preference. The results suggest that items are slightly less expensive when purchased at the School's RSS than at local vendors. However, the savings to the School in operations costs and to the Navy in Budget Project 28 funds, by eliminating the RSS, far outweigh the higher cost of purchasing items from local vendors. We also found that the same level of customer support could be provided if the NPS RSS were eliminated. As a result, we recommend eliminating the RSS at NPS and implementing the government-wide commercial credit card program.

TABLE OF CONTENTS

I. INTRODUCTION	1
A. BACKGROUND	1
B. SCOPE	2
C. RESEARCH QUESTIONS	3
D. METHODOLOGY	4
E. ORGANIZATION OF THE STUDY	4
II. THE ENVIRONMENT AND OPERATIONS OF A READY SUPPLY STORE	7
A. ENVIRONMENT	7
1. Regional Inventory Management	8
2. Defense Business Operations Fund Defined	8
3. The Flow of Money	10
B. THE READY SUPPLY STORES MISSION	12
C. MATERIAL CLASSIFICATION	13
D. READY SUPPLY STORE STOCKING POLICY	13
E. INVENTORY MANAGEMENT AT NPS	14
1. System Automation	14
2. The Inventory Order Cycle	15
F. CUSTOMER SHOPPING AND BILLING	16
1. Base Replenishment of the Defense Business Operations Fund (DBOF)	17
III. COSTS OF READY SUPPLY STORE OPERATIONS, ALTERNATIVES, AND COST COMPARISONS	19
A. COSTS OF READY SUPPLY STORE OPERATIONS	19
1. Labor Requirements and Costs	19
2. Non-labor Requirements and Costs	21
3. Summary of Labor and Non-labor Related Costs	22

B. ALTERNATIVES TO CURRENT OPERATIONS	22
1. Credit Card Program	23
2. Partnering with the Fleet Industrial Supply Center	25
C. CUSTOMER PREFERENCE	28
1. Ease of Ordering	28
2. Customer Service	29
3. Selection	29
4. Effects on Departmental Stocking Objectives	30
5. Summary of Customer Preference	30
IV. SUMMARY, FINDINGS, AND RECOMMENDATION	31
A. SUMMARY	31
B. FINDINGS	31
C. RECOMMENDATION	34
APPENDIX A. LIST OF READY SUPPLY STORE OUTLETS	35
APPENDIX B. PRICE COMPARISON BETWEEN GOVERNMENT AND LOCAL VENDORS	37
APPENDIX C. CUSTOMER PREFERENCE SURVEY	41
LIST OF REFERENCES	45
INITIAL DISTRIBUTION LIST	47

I. INTRODUCTION

A. BACKGROUND

This thesis will determine whether or not the Naval Supply Systems Command (NAVSUP) can save Stock Fund Budget Project (BP) 28 funds by adopting a more cost effective alternative to remote site Ready Supply Stores (RSS). The inventory in an RSS is funded through BP 28 and consists of retail stocks of Defense Logistics Agency (DLA)-managed items used to support small, remote activities outside a Fleet Industrial Supply Center (FISC) region.

Material ordered and held at an RSS is no longer visible to the wholesale stock system when the store places it in inventory. The loss of visibility is due largely to the fact that, in the past, systems for managing inventory at these stores have not been fully utilized to manage the inventory from a central location, such as the nearest FISC. Not only is the inventory being held at a remote site but, as we will discuss, the funding of this inventory is being provided by a remote activity. Because the RSS does not budget for its own inventory, there is little incentive for the store to streamline operations or inventories. This has the potential to lead to ineffectiveness and inefficiencies in administering BP 28 funds.

Special Accounting Classes (SACs) are used to designate the account under which the financial transaction is being processed. The major classes used by Navy stock points are [Ref. 1]:

<u>Class</u>	<u>Definitions</u>
200	Material procured for main inventory records and warehouses.
203	Material procured for shop stores/ready supply stores.
207	Material for Tenders, Repair Ships, and Aviation Ships.
208	Carried items procured from any source under the Navy Stock Account (NSA) when not in stock (NIS).
260	Material procured for SERVMART.

Budget Project 28 funds 9-cognizance (cog) Navy retail inventory that is procured in support of the above SAC codes. Cogs are two position symbols that define the item manager and designate the store's account to which the material is charged. Odd number cogs identify Navy Stock Account (NSA) material and even number cogs identify Appropriations Purchases Account (APA). Examples of 9-cog materials are automotive (9A), clothing and textiles (9D), construction (9C), general (9G), and General Services Administration (GSA) (9Q). [Ref. 2]

This research will investigate potential cost savings for BP 28, and the economic and customer service impact of removing BP 28 funding of RSS inventory for a base or activity. Alternatives to providing services rendered by RSSs will be examined in detail in Chapter III.

B. SCOPE

Currently, there are over 50 remote activities, including one at the Naval Postgraduate School (NPS), Monterey, CA. These activities receive their funding through the BP 28 for the purpose of procuring different classes of material. We will concentrate

on just those funds which support SAC (203) material.

We reviewed the funding and inventory management environment within which RSSs operate. We examined the RSS's mission, operations, and costs to demonstrate how the stores interact with their environment. Additionally, we interviewed the six largest customers of the RSS at the Naval Postgraduate School to assess customer satisfaction with the store.

The material provided by these stores is necessary because it provides for the smooth administrative operation of the host activities. Given the administrative importance of RSS stock, this thesis will examine the current operating procedures and generate alternatives for providing this material and service to its customers.

C. RESEARCH QUESTIONS

We address the following primary question:

- What is the most cost-effective method of delivering the services currently provided by the Ready Supply Store at the Naval Postgraduate School?

We also address related questions such as:

- What is the mission of the RSS and how does it operate with respect to demand recording, reorder processing, inventory management, and customer billing?
- What is the Stock Fund Budget Project 28 and how does money flow from the Defense Business Operations Fund (DBOF) through the BP 28 office to the remote site RSS?
- Who controls the funding for the RSS and what is their stake in the operation of the store?
- What alternatives are there to providing the current service and what are their associated costs?

- The implementation of an alternative to the current RSS could possibly shut down the store. In the event this happens, what costs are saved by closing the stores?
- What is the customer's preference with respect to current operations or a stated alternative?

D. METHODOLOGY

The primary method of data collection for sales and demand history was from interviews with personnel at the RSS located at the NPS. We obtained background information on the Stock Fund Budget Project 28 and financial policy from NAVICP code M0133, the Navy Stock Fund Division Head, and from NAVSUP 132D, Financial Policy Office. We gathered information pertaining to inventory management from NAVSUP 4111D, Retail Inventory Management Office. NAVSUP code 426, FISC Support Division Head and FISC Norfolk, VA. provided information on the implementation of the Uniformed Automated Data Processing System (UADPS) and its applicability to remote site RSSs. The test site for our study was the RSS and chain of command at NPS.

E. ORGANIZATION OF THE STUDY

This thesis is organized to give an overview of remote site Ready Supply Stores and its environment, both inventory management and funding related, to determine the impact of removing funding for the inventory carried by the RSS. Chapter II provides a look at the current operating environment and the flow of funds from Congress through the DBOF to an individual RSS. In Chapter II, we also examine how the RSS interacts with FISCs in the area of wholesale and retail inventory management. We also discuss the information technology for managing site inventories, customer requisitioning procedures,

and billing. Chapter III presents the cost of operating an RSS, alternatives to the current operating system and their associated costs, customer feedback on the current system, and the proposed alternatives. Chapter IV discusses the principle findings, conclusions, and recommendations.

II. THE ENVIRONMENT AND OPERATIONS OF A READY SUPPLY STORE

This chapter focuses on the overall environment in which an RSS operates. We provide an overview of regional inventory management policies developed by the FISC and how the RSS ties in. Inventory carried at the FISC, and ultimately at the RSS, is considered wholesale inventory that is funded through the DBOF. We present a thorough explanation of the DBOF, defining the revolving fund concept and the flow of funds from its DBOF origin to the BP 28 office, the stores, and back into the DBOF corpus.

We define the RSS's mission, operations, and how it fits into the framework noted above. Specifically, we use the RSS at NPS as the basis for discussion. We discuss several terms and secondary questions identified in Chapter I: why the store exists, how the store operates, how reorders are processed and from where are the stores resupplied, and how the inventory is managed and how the purchase of goods from the RSS replenishes the DBOF corpus.

A. ENVIRONMENT

The Department of Defense (DoD) is evolving into a more streamlined organization due to a changing political environment with tighter fiscal constraints. Effectively using available funds is one of the primary objectives in maintaining the desired level of readiness in the current budget climate. One aspect of reducing current operations costs is to efficiently manage the DoD's material resources, specifically its inventory, through improved functioning of the FISC and related activities such as RSSs, Servmarts, and Shop Stores.

1. Regional Inventory Management

The FISC provides “regionalized” support concentrating on five broad areas: Regional Inventory Support, Procurement, Hazardous Material Management, Transportation, and Personal Property. We review regional inventory support because it has the greatest relevance to our study. FISC inventory consists of wholesale and retail echelons of inventory located at multiple physical inventory sites in a geographic region (i.e. FISCs, Servmarts, RSSs, and Shop Stores). The retail component of that inventory supports the consumer level requirements of activities for which the FISC performs inventory management functions. Consumer inventory is managed by the FISC. A current emphasis in military inventory management is to gain visibility of assets over geographically dispersed areas and to manage it more effectively. Through the FISC, costs can be reduced through consolidation of functions that are now duplicated at dispersed operating sites such as an RSS. This consolidation and regional visibility of material could support reduced consumer inventory levels as well. [Ref. 2]

FISC consolidated inventory management achieves DBOF savings and improves support by treating the separate requirements of customer activities as a whole and computing regional levels of retail stock. That stock is then apportioned to remote sites and the main FISC site based upon site demands.

2. Defense Business Operations Fund Defined

The DBOF is a large, consolidated, revolving fund which can be defined as an account or fund in which all income is derived from its operations and is available to finance the fund’s continuing operations without fiscal year limitation. As a financial

management structure, the DBOF provides a framework that enables both customers and providers of these activities to focus on the costs of doing business and to monitor those costs. [Ref. 3]

Under the DBOF, greater cost visibility leads to a closer scrutiny of costs and increased accountability for products and services. This suggests that providers need to devise methods for producing quality goods and services at lower costs. Managers need to pay close attention to cost factors such as labor hours and materials. They also need to concentrate on improving performance efficiency. [Ref. 3]

Figure 1 demonstrates how a revolving fund operates.

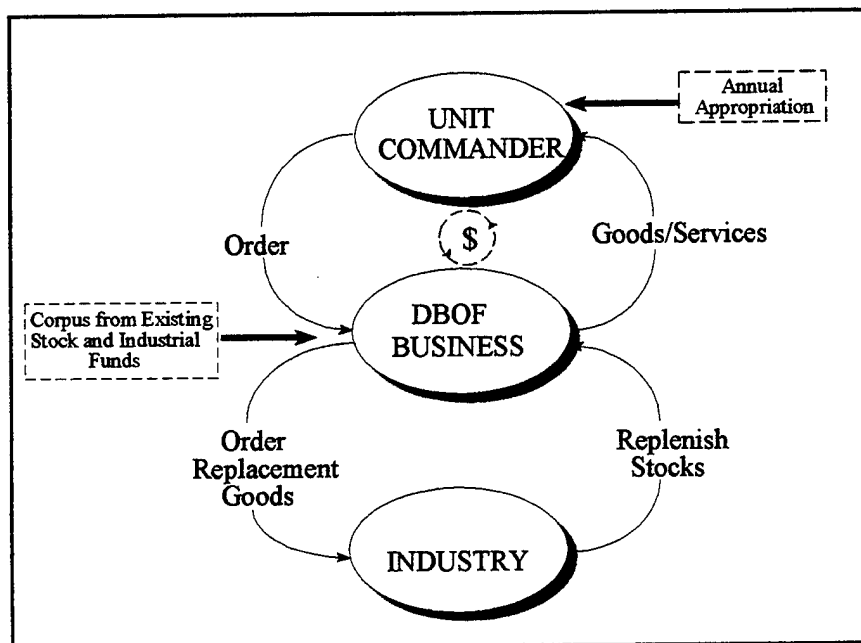


Figure 1 Revolving Fund Operation

As support providers accept orders and perform work for their customers, they use cash in the DBOF to pay their costs. Ultimately, customers are billed and reimburse the DBOF. This revolving cycle continues without fiscal constraints; thus the DBOF is

viewed as a revolving fund.

Congress appropriates the capital for the revolving fund to operate initially. Thereafter, the fund becomes self-sustaining through the selling of goods and services at prices that recover all costs. A revolving fund structure serves two purposes: First, it includes the costs of producing goods and providing services in the prices charged to customers. Second, it acquires and holds inventories until the customer purchases them and the fund recovers the cost of goods sold [Ref. 4]. The DoD has used revolving funds to gain greater control of the cost of work performed by providers of support services.

3. The Flow of Money

Given this framework, Figure 2 demonstrates the flow of Navy money from Congress to specific BP administering offices.

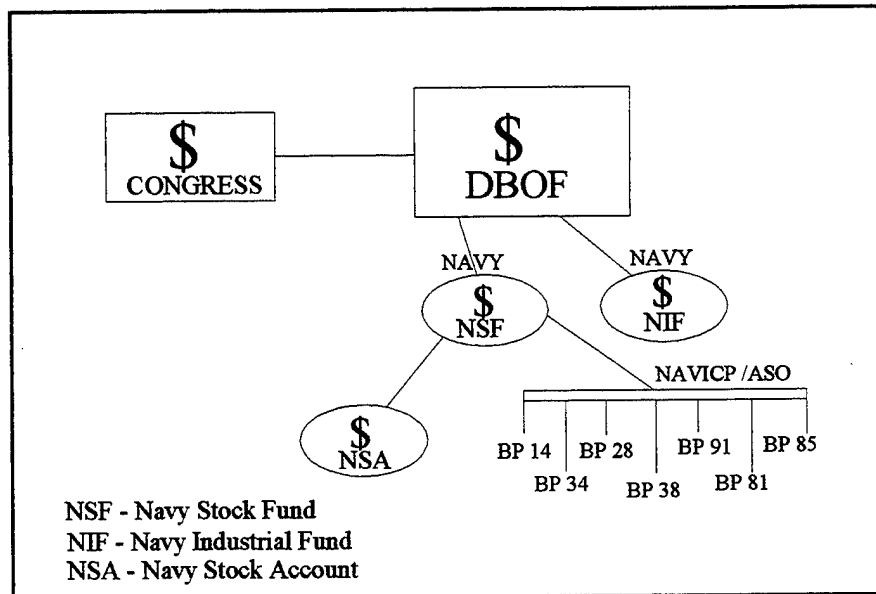


Figure 2 Flow of Navy Money

BP 28 fund holders listed in Appendix (A) submit requests and justification for funds needed for their support requirements. Outlets listed in Appendix (A) submit projections and justification for their production costs. The DBOF is supported through Congressional appropriations to its customers. The RSS, on the other hand, receives budget authority under the DBOF through the BP 28 fund holders Annual Operating Budget (AOB).

The BP 28 office allocates funds to the BP 28 fund holders listed in Appendix (A). Comptrollers at the activities then provide an operating target or allowance to the BP 28 outlets (Ready Supply Stores, Servmarts, and Shop Stores) also mentioned in Appendix (A). Figure 3 provides an example of the flow. Amounts displayed are not the actual amounts.

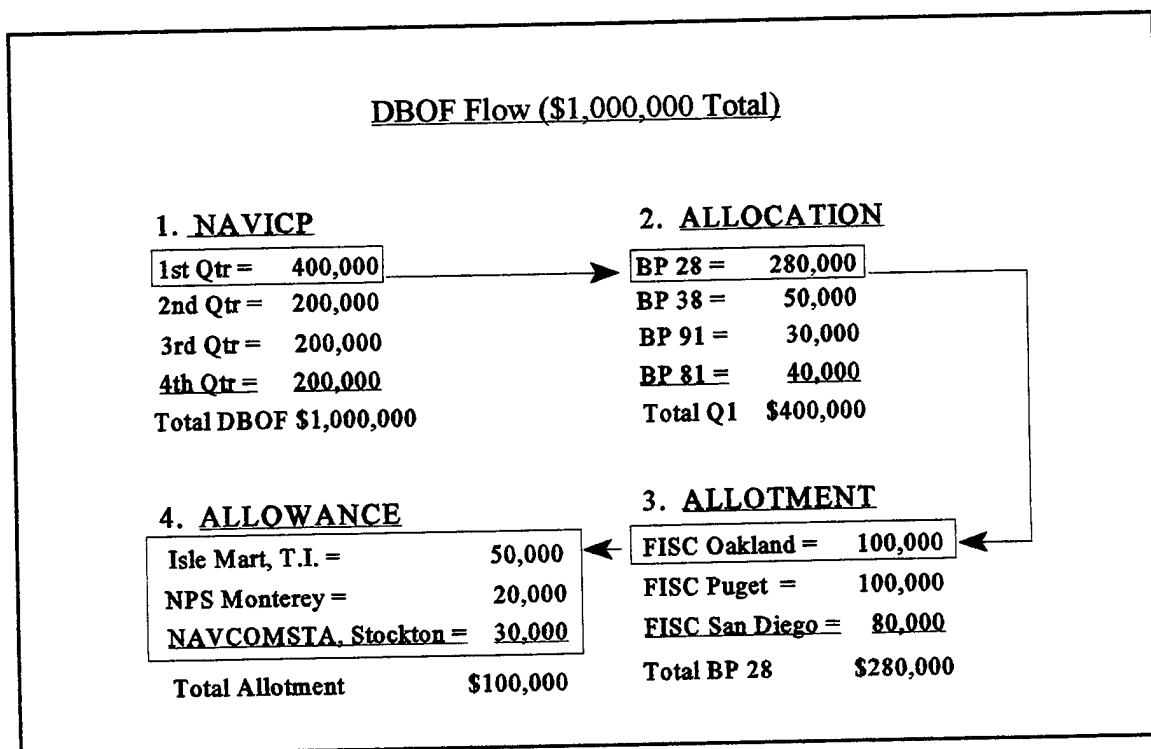


Figure 3 Flow of DBOF Funds to BP 28 Outlets

After the stores receive their allowance they can then order material to be held as inventory in their stores to support customer demands. [Ref. 4]

B. THE READY SUPPLY STORES MISSION

NAVSUP provides supply outlets (SERVMARTS, Ready Supply Stores, and Shop Stores) where its customers can serve themselves to needed supplies with minimal delay. This form of retail operation was originated by the old NSCs and continued by the new FISCs as a way to reduce requisitioning workload while still satisfying customer demand in a remote region. RSSs were seen as a means of providing supply support to remote site FISC customers for high demand, low cost consumable items normally provided by the FISC at the wholesale level. The discount warehouse method typical of an RSS operation has resulted in an appreciable reduction in processing costs since each customer can procure multiple units of several different line items with a single requisition document. If the demands are submitted to a wholesale stock point, such as the FISC or a DLA depot, requisition documents for each line item are necessary. [Ref. 5]

The RSS provides retail stocks of DLA material to its customers on a "cash and carry" basis. Inventories include a full line of office supplies, light industrial products, and general purpose tools that have high demand, and low dollar value required for day-to-day operations by its customers. Objectives of the RSS are [Ref. 6]:

- To expedite and improve service to customers by reducing the amount of documentation and time required to obtain high demand items.
- To decrease the number of open purchase requisitions processed by the base Supply Department for inventory in support of administrative tasks.

- To encourage their customers to reduce locally held inventories (i.e. that held by consumers in the "supply closet") by affording them more expeditious service.

C. MATERIAL CLASSIFICATION

RSSs are similar to all other stores in that the material sold is identified as "consumable." Consumable material is any material that, after issue from stock to the final user, is consumed in use or, while having continuing life, becomes incorporated in other property thus losing its identity when it is dropped from property accountability [Ref. 5]. Consumable items are sometimes referred to as "expense" items. [Ref. 7]

D. READY SUPPLY STORE STOCKING POLICY

The parent FISC's instruction [Ref. 8] provides the following guidelines as to what the stores can carry:

- The items must be fast-moving with recurring demand. Recurring demand is defined as at least two units per month, sustained over a 12-month period.
- The unit price is less than \$700.00.
- The stocked item cannot be repairable, or classified.
- The item is not hazardous material requiring special handling.

In addition, although the stock levels of individual items may vary, the average on hand inventory over all items must be less than a 30 day supply. The General Services Administration (GSA) provides the bulk of the inventories from two sources; 1) the nearest Customer Support Center (CSC) (in the case of the Naval Postgraduate School, Stockton, CA. provides), and 2) through the Federal Supply Service System.

E. INVENTORY MANAGEMENT AT NPS

1. System Automation

RSS inventory is part of the geographically dispersed inventory that FISCs were intended to provide support for. The RSS manages inventory through a centralized data base. The heart of the data base is a Navy owned software program, Automated Ready Supply Store & SERVMART Inventory Management System (ARSSIMS), which is a form of Electronic Point of Sale (EPOS) system. The Fleet Material Support Office (FMSO) designed and maintains the ARSSIMS program. The purpose of the system is to maintain the store's sales, receipts, and order generation transactions. [Ref. 9]

The system works like those seen at retail outlets in the private sector. Material is picked from the shelves by customers and brought to the checkout counter. Each item of inventory carries a bar code label which contains the stock number, unit quantity, and unit price. Items are scanned at the checkout counter by the "cashier" and a printout is produced, like the receipt received at a grocery store, and given to the customers for verification. At the same time, sales and demand files are updated in "real time" in the ARSSIMS data base.

The system automatically sets high and low inventory limits based on a three month demand forecasting model [Ref. 9]. RSS stock control clerks share the responsibility for inventory management through discussions with the store manager and by continuously monitoring and updating the Master Inventory File (MIF). The data base generates various reports and material requirements that can be consolidated in a requisition format and used to send data electronically to the GSA.

Currently, the system operates as a stand alone unit, meaning all inventory management functions are performed by the ARSSIMS at the store. In the current RSS operations, FISC does not screen RSS material requirements nor do they track RSS issues, receipts, or status of inventory.

The ARSSIMS manual states that, in addition to its stand alone capabilities, the system is designed to interface with UADPS at the FISC so that accounting records could be received by the host computer at the FISC to summarize the state of the RSS inventory. [Ref. 9] Fully utilizing the ARSSIMS capabilities by interfacing with the FISC could provide the FISC with management reports that detail demand history, current status of the inventory, and provide visibility of stock carried at remote sites.

2. The Inventory Order Cycle

Reorder requirements are processed weekly by the RSS and transmitted to the GSA via electronic data transfer by means of the MILSTRIP/FEDSTRIP, a specialized requisition data coding system utilized by federal agencies and the DoD for ordering supplies and materials. Customer account numbers, GSA catalog numbers, shipment priorities, cost, and related data are encoded on the MILSTRIP/FEDSTRIP requisitions. Customers are charged through a special charge back system that provides interagency transfers of funds at the Defense Finance and Accounting Center (DFAS). The RSS receives their orders from the nearest GSA regional distribution center if the material is carried in the GSA stock system; if not, the requirement is processed as an open purchase request by the base supply department at NPS.

Material flows from manufacturers to one of four GSA regional distribution

centers based on orders received by them and orders processed by any of the 12 GSA business centers/CSCs. CSC's carry a limited quantity of high demand items for immediate shipment to any RSS. The Stockton CSC provides two day service for limited quantities of items with the highest demand [Ref. 10]. Customers pay a slightly higher price for this premium service. Remaining inventories (approximately two-thirds) are ordered through the GSA Federal Supply Service, taking from four to six weeks to arrive. Upon arrival at the RSS, material is scanned into inventory utilizing the ARSSIMS which updates inventory quantity, price, and location.

F. CUSTOMER SHOPPING AND BILLING

Each department at the NPS is given an operating budget by the base Comptrollers office for use at the RSS [Ref. 11]. Customers shop at RSS using predistributed identification cards, which are distributed by department to authorized shoppers within the department. The cards are used at the time of checkout when the sales clerk is scanning the material the customer is purchasing. After the material is scanned, the clerk then scans the customer identification card so the ARSSIMS can register the shopper's identification, what items and how many were purchased, and the total dollar value of the sale. A printout of this information is provided for customer records for future verification. The sales information is added within the ARSSIMS to the customer account for the month. [Ref. 10]

At the end of the month, a bill is generated and sent to the comptroller and the customer's departmental supply clerk. It is the supply clerk's responsibility to distribute the bills to the authorized shoppers for verification and to track funds available for future

use at the RSS. After the bill has been verified, the supply clerk prepares a money value only (MVO) requisition document that is submitted to the Comptrollers office for payment of the bill [Ref. 6]. An MVO requisition is a supply document that is used much like a check in the private sector. It does not provide a detailed description by item like a regular supply requisition, but rather authorizes the reduction in funds from the department budget for the dollar amount stated on the bill as verified by the shopper.

1. Base Replenishment of the Defense Business Operations Fund (DBOF)

When the Comptroller's office receives the MVO requisitions, the requisitions are sent to the technical editing (tech edit) section for input to DFAS in Cleveland, OH. The base pays for material purchased from RSSs with base Operations and Maintenance (O&M) funds. Inventory held at RSSs is SAC (203) material, and SACs had been established to designate the account (in this case NSA) under which the financial transaction is being processed. Through the use of accounting data provided through inputs from the tech edit section at the base Comptrollers offices, DFAS can replenish the DBOF corpus with funds from NPS's O&M account.

III. COSTS OF READY SUPPLY STORE OPERATIONS, ALTERNATIVES AND COST COMPARISONS

This chapter focuses on the costs, both labor and non-labor, of operating the RSS at NPS. We compare operating costs of alternatives and the status quo, and give a price comparison of government versus private sector sources of supply. We close this chapter with analysis of a customer preference survey, Appendix (C), distributed to the six largest customers of the RSS at NPS.

A. COSTS OF READY SUPPLY STORE OPERATIONS

To determine the costs of RSS operations, we interviewed managers in the store, the Comptrollers office, and the Public Works office at the Naval Postgraduate School.

1. Labor Requirements and Costs

Ready Supply Store operations are performed by three civilian employees. The store manager at pay grade GS-7 plans, coordinates, and directs inventory management functions of the store. He provides technical guidance to the facility's staff and ensures that procedures set forth in the facility operations manual are current and compatible with NAVSUP directives. The manager maintains master inventory files and reviews all output reports such as demand history, reorder requirements, inventory levels, and billing records. Additionally, he provides an interface with the RSS customers to evaluate customer satisfaction with service and selection. [Ref. 6]

The Supply Clerk's (WG-6) primary duties are to register the sale of retail stock utilizing the ARSSIMS program, restock shelves, catalog incoming material, and maintain

a clean, neat shopping environment for the stores customers. He also provides feedback to the store manager with respect to stocking levels and requirements, customer satisfaction, and helps distribute and dispose of excess material. [Ref. 6]

The Warehouse worker (WG-6) is responsible for receiving supplies at the RSS staging area, a 504 foot square building located about a half mile from the main store. When material arrives he checks the quantity and item nomenclature against the shipping documents and reports any damage and or irregularities to the store manager. Once received, the worker stores the material at the staging area awaiting issue to the main store. The RSS is not allocated a truck for transfer of goods from the staging area to the main store, so workers use the base supply department's truck. [Ref. 6]

The labor costs for the three RSS employees over a one year period are:

Supply Clerk (WG-6)	\$ 37,812.66
Warehouse Worker (WG-6)	\$ 37,812.66
Store Manager (GS-7)	<u>\$ 38,344.02</u>
Total Labor Cost	\$ 113,969.34.

The total includes all employee fringe benefits. [Ref. 11]

2. Non-labor Requirements and Costs

The bulk non-labor costs are from the utilities needed to operate the RSS. The RSS operation had a utility costs break down for the year as follows [Ref. 12]:

<u>Utility</u>	<u>Cost</u>
Electricity	\$ 4,138.24
Sewage	\$ 195.20
Steam/gas	\$ 897.92
Water	<u>\$ 351.36</u>
Total Utilities Cost	\$ 5,582.72.

Other non-labor related costs and requirements were transportation, communications, and office equipment. These costs were either negligible or were unable to be distinguished from the main base operations costs. For example, the RSS utilized the Supply department's vehicle for transfer of material from the staging area to the main store. Because the vehicle was provided by the Supply department and not rented to the RSS, transportation costs would not be considered an operating expense of the store [Ref. 10]. The same principle applies to the office equipment which the base provided consisting of three computers and two printers [Ref 10]. The ARSSIMS system, which runs on one of the three computers, was provided by the FMSO at no cost to the activity. Updates to the system are also provided at no cost. For communications, Public Works charges \$ 20.00 per line utilized by the store. The store has three lines for a yearly cost of \$ 60.00 [Ref 13]. For the actual phone service, the Comptroller's office provides a NAVCOMP form 2275 funding document to the Naval Communications Station (NAVCOMTELSTA) in San Diego, CA [Ref. 11]. Funding is based on previous and

upcoming years communications needs. The funds cover communications for the entire base and no itemized long distance or local phone bill is provided. If the funds run out during the year, NAVCOMTELSTA requests more funds from the Comptrollers office. The Comptrollers office indicated that NAVCOMTELSTA's customers were unhappy with this arrangement and have logged several complaints.

3. Summary of Labor and Non-labor Related Costs

The following summarizes the yearly costs of operating the RSS at NPS:

<u>Expense Item</u>	<u>Cost</u>
Labor	\$ 113,969.34
Utilities	\$ 5,582.72
Communications	<u>\$ 60.00</u>
Total Operating Costs	\$ 119,612.06.

B. ALTERNATIVES TO CURRENT OPERATIONS

We have discussed what NAVSUP's intentions were when deciding to establish RSSs (the overall environment), how the store operates within that environment, and the associated costs of operations. Now we consider the following two alternatives to determine if either provides cost savings for delivering services provided by the RSS to its customers: 1) a base wide government credit card program used to buy commercially available goods now provided by the RSS; or 2) maintain the current operation but partner with the nearest FISC to provide greater visibility of material in the logistics pipeline and continued on-site service to the stores customers.

1. Credit Card Program

The General Services Administration, Federal Supply Service (FSS) awarded a contract in 1994 for Government-wide Commercial Credit Card Services to Rocky Mountain BankCard System, Inc. (RMBCS). The contract provides, at the requests of Federal ordering agencies, Government-wide commercial purchase cards for civilian and military Government employees to make purchases for official Government use. The commercial purchase card is intended to stream-line payment procedures and reduce the administrative burden associated with traditional purchasing of supplies. [Ref. 14]

The International Merchant Purchase Authorization Card (IMPAC) is currently in use under the RMBCS contract. The costs for implementing the IMPAC program are minimal because the contract states that RMBCS will provide training on contract terms, material to implement the program, and program support at no cost to the agency implementing the program. The only costs associated with this alternative are those incurred through training card holders. Each base has an Agency Program Coordinator (APC) who administers the program, provides small purchase training, and functions as the agency's primary liaison to RMBCS and GSA. Small purchase training is conducted by the APC through use of a CD ROM provided by NAVSUP Code 02 Contract Management Directorate. The CD is provided at no charge to the agency and is set up on a computer in the contracting office at NPS. A local area network (LAN) version is available from NAVSUP for a one time charge of \$100. This will allow training to occur base-wide.

Each cardholder's account includes a single purchase limit. The base APC assigns

this limit in increments of \$50, not to exceed \$2,500, with a total yearly credit line of \$20,000. [Ref. 14]

The IMPAC can be used over the counter or by telephone. In an over-the-counter purchase, the cardholder goes to the merchant's place of business to make the purchase. When the order is placed by phone, the contractor delivers the supplies to the activity but the cardholder must confirm that the contractor [Ref. 14]:

- Not charge the purchase card account until all items are shipped,
- Not back order items or deliver partial quantities, and
- Deliver, or have available for pick-up, all items no later than 30 days from the date of the order.

The card may not be used to buy or pay for cash advances, rental or lease of land or buildings, or telecommunications services. Additionally, NPS must satisfy requirements for supplies from or through the sources listed below, order of priority [Ref. 14]:

- NPS inventories if available.
- Federal Prison Industries, Inc. supply catalogue.
- Procurement lists of products available from the Committee for Purchase from People Who Are Blind or Severely Disabled. For example, the National Industry for the Blind (NIB), or National Industry for Special Handicaps (NISH).
- Wholesale supply sources, such as stock programs of the GSA, the Department of Veterans Affairs, and military inventory control points.
- Federal Supply Schedules.
- Commercial sources.

To identify possible cost savings by using commercial sources, we selected 93

items from the RSS at NPS to compare with local commercial sources of supply. These 93 items were a cross section of the highest demand items, office supplies, tools, and cleaning supplies. Through visual inspections and detailed descriptions in the FEDLOG (Federal Logistics) catalogue at NPS, we were able to match similar or exact items from the RSS with local vendors. For comparison, we chose Office Depot and Staples because of their location, selection, quality, and competitive prices.

Appendix (B) compares the selling price at the RSS with the least expensive retail price found between the two vendors. The RSS sells material at the same price that they buy it from GSA. The comparison shows that the government, by using the NPS RSS, or if NPS opted to order direct through GSA, saves \$6,706.80 annually. A 20% savings over commercially available sources for the 93 items.

2. Partnering with the Fleet Industrial Supply Center

Partnering with another military activity is a relatively new concept that involves a mutual agreement between the two activities to combine resources in order to provide better service to the Government and the end user. In this case, having the RSS partner with the nearest FISC would combine the facilities and services of the RSS with the inventory management capabilities of the FISC to provide greater inventory control and visibility of supply systems stock. As a case study of such an arrangement, we consider the partnering of the RSS at the Commander in Chief Atlantic Fleet (CINCLANT) compound in Norfolk, VA. with FISC Norfolk.

Earlier, we discussed that SAC (203) material ordered for the RSS loses its visibility in the wholesale stock system when placed into stock at the RSS. Partnering

with FISC Norfolk required the CINCLANT compound RSS to: have an inventory management system compatible with FISC's UADPS II and; on paper, to turn in all of their stock to the FISC. Both EPOS and ARSSIMS are capable of transmitting and receiving information with UADPS II. The FISC created a Master Stock Item Record (MSIR) of the material turned in, and gave it a location that specifically identified the material to the CINCLANT compound RSS and, on paper, re-issued the material back to the store. [Ref. 16]

CINCLANT's RSS performs the same operations as it had before the partnering; but rather than perform inventory management functions on site, it now feeds inventory information to the FISC via CINCLANT's current operating system EPOS. FISC Norfolk evaluates demand and inventory levels so that it can reposition stock elsewhere among partners, if necessary, resets inventory levels based on demand history, or recommends disposal of excess or dead stock. RSS customers shop and are billed, just as they were prior to the partnering, using O&M funds to replenish the DBOF. Partnering provides FISC inventory management personnel greater visibility of supply system stock and provides CINCLANT's RSS more inventory management tools to better support their customers. [Ref. 16]

Just as RSS operations are the same as before partnering, so are the procedures for stock replenishment. CINCLANT still relies on funding from the Comptroller at FISC Norfolk who considers the RSS to be another BP 28 activity. By choosing this alternative NAVSUP gains visibility of material held at the compound, but finds no cost savings for BP 28 because those funds are still required for stock replenishment. Any savings to the

BP 28 office would be in how efficiently FISC Norfolk managed the partnered RSS inventories. [Ref. 16]

An alternative to this partnering scenario would be for the RSS at the CINCLANT compound to do a one time buy of all SAC (203) material in stock using CINCLANT O&M funds. The RSS would still interface with the FISC through EPOS for inventory management. However, since the RSS would be using O&M funds to replenish stock, it would be received by the store as end use material or material already paid for by CINCLANT. CINCLANT RSS customers would be given a budget just as before, except that when they receive a bill at the end of the month, it would be for verification only and a MVO to the Comptroller's office would not be necessary. In this way, the BP 28 office would not have to allocate funds to the FISC who then apportion it among their BP 28 activities (RSS, SERVIMART, Shop Store) for procurement of SAC (203) material. Applying this last method to the RSS at NPS we estimate the potential savings to BP 28 to be approximately \$45,000 monthly, or \$540,000 per year. Considering that there are 57 RSSs throughout the Navy, and assuming that NPS represents a typical RSS, BP 28 could realize savings of \$30,780,000 if other RSSs were converted to FISC management and ordered their material as end use.

This method of ordering material as an end user would also cause the RSS and the command to operate more efficiently or possible suffer a short fall in O&M funds. Since the RSS would be replenishing stock through use of O&M funds vice BP 28, there would be greater emphasis on reducing stock levels, eliminating dead or slow-moving stock, and scrutinizing of reorders.

C. CUSTOMER PREFERENCE

We conducted interviews with the most frequent users of the NPS RSS (five departmental supply clerks and the supply clerk from the Public Works office). Using Appendix (C), we determined customer preference between the current operation and the alternatives proposed by this study. The six users made up 46% of the yearly sales for the highest moving items in the RSS [Ref. 10]. We received 100% participation from the group.

Areas used for comparison were ease of ordering, service, material selection, and effects on departmental stocking objectives. We included the last area to see if the clerks would order more if the material were no longer on site. Currently, NPS has a base-wide government credit card program, so the participants were familiar with the ordering requirements of this alternative. Familiarity with both the requirements and operation of the credit card program and the current operations allowed the clerks to better respond to our survey.

1. Ease of Ordering

Five of six clerks stated that placing orders was more convenient with the credit card because they could order from their desk without having to walk across campus to the RSS. Although five of six of the clerks preferred the card for placing orders, four of six felt that there was more documentation and time required to prepare the order through GSA and local vendors. All six clerks felt that requisition tracking time was less if ordering from Staples and Office Depot because of prompt delivery. When ordering through GSA or other government sources though, they felt that their tracking time

increased due to longer lead times.

2. Customer Service

The service was considered better by five of six clerks when using the credit card because, as previously stated, the clerks could order from their desks using GSA, Federal Supply, or local vendor catalogs. With GSA or other government services, the clerks could receive their material in four to six weeks unless they paid a premium for two-day service. Staples and Office Depot provide next day delivery with no extra charge for orders over \$50. All six of the clerks stated that these delivery schedules were sufficient to meet their supply requirements.

When ordering with the credit card, all supply clerks preferred Staple's and Office Depot's policy of prompt replacement for incorrect or damaged items. When using GSA, however, three of six clerks had problems with replacement of damaged or incorrect items. Those clerks who experienced problems stated that it took too long to either replace items not accepted or receive credit.

3. Selection

For selection, four of six clerks were not satisfied with the variety of material carried at the RSS, but for the material carried, only one of six stated that they seldom or never had trouble finding sufficient quantities. All clerks acknowledged that the material carried by the store was sufficient in quality to meet their requirements but the majority stated a personal preference for the wider selection of GSA and local vendors. Most importantly, all of the clerks felt they could carry out their mission if the RSS were eliminated and they ordered material through GSA and local vendors.

4. Effects on Departmental Stocking Objectives

Finally, the group was asked about departmental storage of supplies and their stocking decisions. Two of six clerks stated they would carry more material if the RSS were eliminated. These two of six felt more inventory was needed due to increased lead times from GSA and other government sources. None of the clerks felt they were having storage problems. In fact, all clerks stated that they had excess capacity for storage. The clerks do not maintain stock record cards for material held in their storage closet. All rely on weekly checks to determine if the stock level for a particular item is getting low.

5. Summary of Customer Preference

From our data we conclude that the credit card program, with drawbacks in documentation required to order material, is the preferred method of obtaining supplies. Most significantly, 100% of the clerks stated they could meet mission requirements with no appreciable increase in supplies carried, in their respective departments, if the RSS were eliminated.

IV. SUMMARY, FINDINGS, AND RECOMMENDATION

A. SUMMARY

This study provided an overview of remote site RSSs and its environment. The research concentrated on the RSS at NPS and the funds that support material carried by the store. In discussing the environment in which the RSS operates, we provided an overview of regional inventory management, and defined the RSS's mission, operations, and procedures for inventory management. To clarify funding for the stores, we provided a thorough explanation of the DBOF, defining the revolving fund concept and the flow of funds from its DBOF origin to the BP 28 office, the remote sites stores, and back into the DBOF corpus.

We presented alternatives to current operations, comparing operating costs, prices at private sector versus government sources of supply, and customer preference. From these comparisons we present our findings and recommendation.

B. FINDINGS

Our research indicates that NAVSUP could save BP 28 funds and the Naval Postgraduate School would save operations and personnel funds by eliminating the RSS. We believe this could be accomplished while still providing the current level of support to RSS customers. By eliminating the RSS, the school could realize an estimated annual savings of \$119,612, and NAVSUP would free up an estimated \$540,000 in BP 28 money to be allocated to other programs.

We found that, through FISC, costs can be reduced through consolidation of

functions that are now duplicated at dispersed operating sites such as an RSS. Currently, the RSS at NPS is utilizing its ARSSIMS as a stand-alone system, thus duplicating inventory management functions and providing no visibility of its stock in the wholesale system. By fully utilizing the ARSSIMS and interfacing with the FISC, the RSS could consolidate inventory management functions by allowing FISC to perform them. In turn, consumer inventory levels could be reduced by providing greater visibility, closer scrutiny of reorders, and repositioning stock within the system.

In Chapter II, we discussed funding for the RSS. We found that the RSS receives DBOF funding for inventory replenishment from sources external to the base. This source, however, does not monitor how the funds are being spent. This arrangement provides little incentive for the RSS to reduce inventory and efficiently administer BP 28 funds given to them.

Through use of a Government-wide commercial credit card, we found that NAVSUP could eliminate the inventory carried at the NPS RSS and still satisfy customer demand. Customer preference surveys indicated that the school could accomplish its mission if the RSS were eliminated and material requirements were obtained through GSA and local vendors.

Surprisingly, prices at local vendors for comparable items were higher, on whole, than government sources for a sample of 93 items sold by the RSS. Using local vendors would cost NPS an additional \$6,706.80 annually, a 20% increase, to purchase their requirements. However, when one considers cost savings to the base by eliminating RSS operations, and BP 28 funds saved by NAVSUP through elimination of RSS inventory, we

find that these savings far outweigh the higher cost of purchasing material in the local economy.

The FISC partnering alternative provided two different scenarios. The first required the RSS to turn in its inventory "on paper" to the FISC. FISC would then establish a MSIR for any items not carried by the them and re-issue the material back to the store. ARSSIMS would be utilized to provide FISC stock control personnel the necessary reports and information to manage the inventory from a remote location. We believe that through partnering with the FISC and fully utilizing the capabilities of ARSSIMS, the current level of support could continue to be provided, and inventories held at the consumer level could be reduced through tighter inventory management. By partnering however, NAVSUP would still fund RSS inventory at NPS through the BP 28 and fail to realize the estimated savings of \$540,000 annually.

The second scenario to partnering with the FISC would require the host base of the RSS to buy the existing inventory out of O&M funds. This burden could be eased by "eating down" the inventories through issues and turn-in of excess or dead stock. The store manager stated that NPS carries, when fully stocked, \$130,000 worth of inventory and could have reduced it to about \$65,000 to implement this scenario. This would require him to order from outside sources until the dollar value of the inventory was reduced to an acceptable level. Because RSS customers would still require RSS material during this inventory reduction process, this strategy could be less effective if tighter controls are not placed on material orders. Each individual RSS and the base Comptroller could decide what an acceptable level is and could track the purchase of material during

this inventory reduction period to keep the cost of implementing this scenario to a minimum. The biggest drawback to this scenario for NPS is finding the O&M funds to buy out the inventory. For NAVSUP to give additional funds to all bases having an RSS would require between approximately \$3,705,000 (57 outlets times \$65,000) and \$7,410,000 (57 outlets times \$130,000) if NPS is considered a typical base.

C. RECOMMENDATION

We recommend that the RSS at NPS be eliminated and the school adopt our first alternative: a government-wide commercial credit card program (IMPAC) to purchase necessary supplies through the GSA or local vendors.

The test site for this research was the RSS at NPS in Monterey CA; further research is needed to identify system-wide savings. Staples and Office Depot were chosen because similar sources should exist near most other RSSs. There are, however, overseas RSS locations that may not have the same source selection. These stores would need to be examined to see if the cost savings found in this study would be consistent with those that may be available overseas. Finally, further research should be done to determine the potential cost savings of changing the priorities for source selection.

APPENDIX A: LIST OF READY SUPPLY STORE OUTLETS

<u>Budget Project 28 Fund Holder</u>	<u>Outlet</u>
FISC Norfolk	Rhodman, Panama
FISC Norfolk	Naval Amphibious Base
FISC Norfolk	Naval Security Group
FISC Norfolk	Portsmouth, Subsistence
FISC Norfolk	Naval Communications Unit
FISC Norfolk	Security Group, Winter Harbor
FISC San Diego	Ingleside, Provisions
FISC San Diego	Marine Corps Air Station, Yuma
FISC San Diego	Marine Corps Air Station, Nitrogen
NAS Pensacola	Flight Gear
NAS Pensacola	Fox Retail
NAS Pensacola	Oxygen Retail
NAS Pensacola	NAS Whiting Field
FISC Puget Sound	Radio Station, Jim Creek
FISC Puget Sound	Subase Bangor
FISC Puget Sound	Subase Subsistence
FISC Puget Sound	Security Group, Anchorage
FISC Oakland	Naval Postgraduate School Monterey
FISC Oakland	Naval Communications Station, Stockton
FISC Pearl Harbor	Pearl Harbor
FISC Pearl Harbor	Naval Magazine, Lualualei
FISC Pearl Harbor	Naval Communications and Monitoring Station
FISC Pearl Harbor	Military Construction Battalion, Ammunition
FISC Pearl Harbor	Military Construction Battalion, Maintenance
FISC Pearl Harbor	Military Construction Battalion, Fuel
FISC Guam	Medical Center, Agana
FISC Guam	Ship Repair Facility
FISC Guam	Contract Center, Singapore
FISC Guam	Naval Support Facility, Diego Garcia
FISC Guam	Jebel Ali
FISC Yokosuka	Naval Hospital, Okinawa
FISC Yokosuka	Ship Repair Facility, Yokosuka
FISC Yokosuka	Naval Security Group Hanza, Okinawa
FISC Yokosuka	Naval Air Facility, Misawa
MCAS, Cherry Point	Flight Clothing
NAS Lakehurst	Partsmart
NAS Lemoore	Fuel Farm
CNRF New Orleans	Automotive

Budget Project 28 Fund Holder**Outlet**

CNRF New Orleans
NTC Great Lakes
CBC Gulfport
CBC Gulfport
CBC Port Hueneme
CBC Port Hueneme
CBC Port Hueneme
CBC Port Hueneme
NAWC Point Mugu
MCAS Iwakuni
MCAS Iwakuni
NS Roosevelt Roads
NSA Naples
NSA Naples
NAS Corpus Christi
NAS Corpus Christi
NS Rota
FISC Jacksonville
NOO St. Louis

West Bank
Clothing
Automotive
Public Works
Public Works
Auto Repair
Military Clothing
Medical Clinic
Automotive
Automotive
Construction
Hospital
Public Works
Naval Communications and Monitoring Station
Flight Gear
Kingsville
Naval Hospital Rota
Naval Supply Corps School Athens, Ga.
Electronics

**APPENDIX B: PRICE COMPARISON BETWEEN GOVERNMENT AND
LOCAL VENDORS**

NIIN	Nomenclature	UI	GSA/RSS Price	Retail Price	Diff.	6 Month Demand	Total Cost/Savings
002210884	Abrasive Paper	PG	\$5.79	\$7.00	\$1.21	10	\$12.10
008264798	AAA Battery	PG	\$4.83	\$5.89	\$1.06	65	\$68.90
005308881	Black 2 in. Binder	EA	\$2.48	\$2.89	\$.40	113	\$45.20
012784130	Black 2 in. Pl. Binder	EA	\$2.34	\$2.79	\$.45	159	\$71.55
009731059	Black Broad Tip Marker	DZ	\$3.45	\$6.77	\$3.32	184	\$610.88
008261876	Black Embossing Tape	RO	\$.52	\$1.60	\$1.08	29	\$31.32
002900599	Bond Paper White	RM	\$3.76	\$8.95	\$5.19	6	\$31.14
002644638	Broom, 30 in. Push	EA	\$15.96	\$22.99	\$7.03	20	\$140.60
002922367	Broom, 18 in. Push	EA	\$10.40	\$4.70	(\$5.70)	12	(\$68.40)
001788315	Brush, Foxtail	EA	\$4.98	\$12.59	\$7.61	25	\$190.25
002003488	Brush, Paint 3.5 in.	EA	\$3.58	\$5.92	\$2.34	81	\$189.54
002915815	Brush, Wire	EA	\$1.62	\$1.99	\$.37	38	\$14.06
009857846	Battery, C Cell	PG	\$7.02	\$8.60	\$1.58	80	\$126.40
000681669	Cleaner, Spray 409 Type	CO	\$2.82	\$1.70	(\$1.12)	90	(\$100.80)
005143523	Clock, Electric 8 Inch	EA	\$11.20	\$8.99	(\$2.21)	11	(\$24.31)
001429051	Dictionary	EA	\$8.59	\$10.36	\$1.77	53	\$93.81
006877904	Disinfectant Pine Oil	QT	\$4.35	\$6.99	\$2.64	120	\$316.80
013236436	Diskettes 3.5 in.	BX	\$6.64	\$7.49	\$.85	600	\$510.00
002930983	Drill Bit Set	SE	\$35.49	\$115.59	\$80.10	7	\$560.70
001032254	Duct Tape Gray	RO	\$2.78	\$3.29	\$.51	115	\$58.65
006198880	Easel Writing Pads	PD	\$7.99	\$10.49	\$2.50	36	\$90.00
011745218	Electric Calculator	EA	\$37.62	\$39.99	\$2.37	18	\$42.66
012022927	Electric Pencil Sharpener	EA	\$20.78	\$10.99	(\$9.79)	27	(\$264.33)
002405943	Electricians Knife	EA	\$7.64	\$10.19	\$2.55	6	\$15.30
008350443	Embossing Machine	EA	\$6.96	\$18.59	\$11.63	5	\$58.15

NIIN	Nomenclature	UI	GSA/RSS Price	Retail Price	Diff.	6 Month Demand	Total Cost/Savings
007078406	File Folders	EA	\$.47	\$.37	(\$.08)	77	(\$6.16)
006630031	File Folders, Hanging	HD	\$7.47	\$5.99	(\$1.48)	123	(\$182.04)
009357135	Fine Ballpoint Pen	DZ	\$3.47	\$4.99	\$1.52	125	\$190.00
001631856	Flashlight, Battery D	PG	\$3.10	\$4.29	\$1.19	40	\$47.60
002705418	Flashlight, D Cell Type	EA	\$3.10	\$7.99	\$4.89	18	\$88.02
000221315	Fork, Plastic	HD	\$3.64	\$1.31	(\$2.33)	19	(\$44.27)
002829699	General Purpose Deter.	GL	\$13.16	\$6.00	(\$7.16)	14	(\$100.24)
006345026	Gloves, Cloth	PR	\$1.49	\$1.49	0	48	0
008491138	Green Embossing Tape	RO	\$.41	\$1.49	\$1.08	20	\$21.60
001415452	Handle Tapered Wood	EA	\$2.02	\$4.49	\$2.47	7	\$17.29
012183892	Hanging Folders Red	BX	\$13.20	\$5.10	(\$8.10)	15	(\$121.50)
009172256	Haze Gray Enamel Paint	CN	\$116.51	\$98.90	(\$17.61)	2	(\$35.22)
002853148	Index Card Box 5 x 8	EA	\$19.57	\$19.00	(\$.57)	3	(\$2.25)
001608477	Index Guides	SE	\$1.46	\$2.55	\$1.09	67	\$73.03
000221316	Knife, Plastic	HD	\$3.54	\$1.32	(\$2.22)	8	(\$17.76)
000822662	Labels, White	BX	\$14.85	\$22.99	\$8.14	6	\$48.84
005901878	Mechanical, Pencil	DZ	\$16.52	\$14.92	(\$1.60)	66	(\$105.60)
002223525	Memo Book 8.5 x 10	EA	\$2.62	\$3.87	\$1.25	45	\$56.25
002223521	Memo Book 8.5 x 5	EA	\$1.50	\$2.79	\$1.29	27	\$34.83
002220078	Memo Book Side Open	EA	\$.72	\$.72	0	170	0
009265176	Metal Scouring Pads	EA	\$.90	\$.99	\$.09	12	\$1.08
002248726	Mop	EA	\$6.30	\$4.10	(\$2.20)	6	(\$13.20)
002638528	Mop Bucket W/Wringer	OT	\$44.78	(\$33.99)	(\$10.79)	3	(\$32.37)
012810768	Organizer, Ultimate	EA	\$35.46	(\$26.99)	(\$8.47)	22	(\$186.34)
013723107	Pads, Writing 5 x 8	DZ	\$8.32	\$10.79	\$2.47	29	\$71.63
007534915	Paint Roller W/Cover	EA	\$1.44	\$1.96	\$.52	2	\$1.04
005437169	Paper Bags 12 x 22	BE	\$27.94	\$39.00	\$11.06	9	\$99.54
002711485	Paper Bags, No. 12	BE	\$23.80	\$17.08	(\$6.72)	2	(\$13.44)

NIIN	Nomenclature	UI	GSA/RSS Price	Retail Price	Diff.	6 Month Demand	Total Cost/Savings
002900593	Paper Plate 6 In.	BX	\$28.47	\$31.96	\$3.49	6	\$20.94
009651709	Paper Towels	BX	\$40.62	\$35.37	(\$5.25)	10	(\$52.50)
002627178	Paper Towels Single	BX	\$24.75	\$18.57	(\$6.18)	36	(\$222.48)
002223455	Paper, Adding Machine	BX	\$15.60	\$19.99	\$4.39	271	\$1,189.61
002237939	Paper, Steno Note Pads	PG	\$11.83	\$14.97	\$3.14	48	\$150.72
001817174	Paper, Xerox 8.5 x 11	BX	\$28.98	\$29.99	\$1.01	1,806	\$1824.06
001817175	Paper, Xerox 8.5 x 14	BX	\$48.16	\$48.99	\$.83	10	\$8.30
001450414	Paper, Computer 11 x 14	BX	\$40.44	\$25.59	(\$14.85)	99	(\$1470.15)
001449601	Paper, Computer 3 Part	BX	\$27.01	\$67.95	\$40.94	22	\$900.68
013576841	Pen, Black Fine Point	DZ	\$6.04	\$4.99	(\$1.05)	128	(\$134.40)
001648950	Pencil, Mechanical	DZ	\$6.01	\$3.99	(\$2.02)	36	(\$72.72)
002815234	Pencils, No. 2	DZ	\$1.05	\$.75	\$.30	475	\$142.50
002633425	Perforator Paper Desk 3	EA	\$23.32	\$6.99	(\$16.33)	37	(\$604.21)
000528698	Picture Frame, 8 x 10	EA	\$2.78	\$2.99	\$.21	30	\$6.30
011958730	Plastic Trash Office	BX	\$12.08	\$11.79	(\$.29)	20	(\$5.80)
011839768	Plastic Trash 32 Gal.	BX	\$16.90	\$8.79	(\$8.11)	46	(\$373.06)
011167867	Post-It Pads 3 x 3	DZ	\$3.51	\$6.39	\$2.88	188	\$541.44
008491139	Red Embossing Tape	RO	\$.52	\$1.63	\$1.11	91	\$101.01
000456923	Remover, Floor Wax	GL	\$2.59	\$9.10	\$6.51	12	\$78.12
012954890	Ribbons For Alps 2000	EA	\$7.77	\$6.77	(\$1.00)	23	(\$23.00)
011790048	Rolodex Rotary File	EA	\$22.40	\$25.99	\$3.59	17	\$61.03
002730128	Shears, Metal Str.	EA	\$7.43	\$3.99	(\$3.44)	5	(\$17.20)
003226231	Socket Set 3/8 In.	SE	\$85.26	\$32.87	(\$52.39)	7	(\$366.73)
002402559	Sponge	EA	\$1.08	\$1.00	(\$.08)	192	(\$15.36)
000221317	Spoon, Plastic	HD	\$3.38	\$1.47	(\$1.91)	4	(\$7.64)
005519817	Tape Transparent	RO	\$1.03	\$1.25	\$.22	26	\$5.72
000745124	Tape, Green	RO	\$5.98	\$6.44	\$.46	3	\$1.38
002666712	Tape, Masking	RO	\$.85	\$4.79	\$3.94	203	\$799.82

NIIN	Nomenclature	UI	GSA/RSS Price	Retail Price	Diff.	6 Month Demand	Total Cost/Savings
005303770	Toilet Paper	BX	\$55.07	\$18.79	(\$36.28)	30	(\$1088.40)
013321560	Ultimate Org. W/Zipper	EA	\$47.01	\$64.99	\$17.98	10	\$179.80
005599843	Varnish Brush 2.5 In.	EA	\$3.47	\$3.59	\$.12	73	\$8.76
008897918	Varnish Brush 2 In	EA	\$1.67	\$3.19	\$1.52	57	\$86.64
008897917	Varnish Brush 3 In	EA	\$2.47	\$1.19	(\$1.28)	37	(\$47.36)
079995568	Video Tapes T-120	EA	\$2.82	\$1.66	(\$1.16)	381	(\$441.96)
011245660	White Ruled Pads 8 x 11	DZ	\$13.98	\$9.18	(\$4.80)	110	(\$528.00)
004498083	Wrench Adjustable 10	EA	\$10.91	\$7.53	(\$3.38)	11	(\$37.18)
002643796	Wrench Adjustable 12	EA	\$12.03	\$9.53	(\$2.50)	10	(\$25.00)
002643795	Wrench Adjustable 8	EA	\$.68	\$8.74	\$8.06	10	\$80.60
001405328	Wrench Cre Adj. 8	EA	\$7.62	\$5.99	(\$1.63)	7	(\$11.41)

Total Cost For 6 Month Period \$3,353.40

APPENDIX C: CUSTOMER PREFERENCE SURVEY

The customer preference survey was broken down into four main areas choosing the six largest customers as the respondents.

A. FIRST AREA: EASE OF ORDERING

QUESTION ONE:

The documentation involved with ordering material through RSS versus GSA and local vendors is:

- (1) Substantially more
- (2) More
- (3) The same
- (4) Less
- (5) Substantially less

QUESTION TWO:

The ease of placing an order once the documentation is complete is:

- (1) Substantially easier
- (2) Easier
- (3) The same
- (4) Harder
- (5) Substantially harder

QUESTION THREE:

Ordering, tracking, and maintenance of requisitions and requisition log keeping through RSS versus GSA and local vendors consumes:

- (1) Substantially more time
- (2) More time
- (3) The same amount of time
- (4) Less time
- (5) Substantially less time

COMMENTS:

B. SECOND AREA: CUSTOMER SERVICE

QUESTION ONE:

Who provides better customer service:

- (1) RSS
- (2) GSA and local vendors

QUESTION TWO:

If the answer to question one of this section is GSA and local vendors, explain why?

COMMENTS:

C. THIRD AREA: MATERIAL SELECTION

QUESTION ONE:

Are you satisfied with the variety of material carried at the RSS?

- (1) Yes
- (2) No

QUESTION TWO:

Does the RSS carry sufficient quantities of material you order?

- (1) Always
- (2) Most of the time
- (3) Seldom
- (4) Never

QUESTION THREE:

The quality of material carried by Government sources versus local vendors is:

- (1) Substantially higher
- (2) Higher
- (3) The same
- (4) Lower
- (5) Substantially lower

QUESTION FOUR:

If the RSS was eliminated at NPS, could you still carry out your mission through use of GSA and local vendors?

- (1) Yes
- (2) No

COMMENTS:

D. FOURTH AREA: EFFECTS ON DEPARTMENTAL STOCKING OBJECTIVES

QUESTION ONE:

If the RSS were eliminated and I had to place my orders through GSA and local vendors, I would carry:

- (1) Substantially more material
- (2) More material
- (3) The same amount of material
- (4) Less material
- (5) Substantially less material

QUESTION TWO:

As a follow on to question one of this section, list the reasons you would carry more or less material?

QUESTION THREE:

If the RSS were eliminated and you feel you would order more supplies through GSA, do you have adequate storage?

- (1) Yes
- (2) No

QUESTION FOUR:

Is there a formal means of tracking stock levels of material carried in departmental storage closets?

(1) Yes

(2) No

COMMENTS:

LIST OF REFERENCES

1. Department of the Navy, *Management of Supply Systems Material*, NAVSUP Publication 437, para. 05090, January 1993.
2. Department of the Navy, *Instructions for Management of Navy Retail Supply System Material*, FMSOINST 4400.12J, 08 March 1989.
3. Department of Defense, *Defense Business Operations Fund (DBOF) Basic Course*, Course Guide, November 1991.
4. Department of the Navy, *Practical Comptrollership*, Module N, Naval Postgraduate School, March, 1996.
5. Department of the Navy, *Inventory Management*, NAVSUP Publication 553, 03 January 1991.
6. Department of the Navy, *Retail Self Service Store Management*, NAVSUPINST 4400.59C, 01 July 1978.
7. Department of Defense, *Material Management Regulation*, DoD 4140.1-R, Office of the Assistant Secretary of Defense (Procurement and Logistics), 04 January 1993.
8. Department of the Navy, *SERVMART Operating Procedures*, FISCOINST 4404.3C, 07 February 1994.
9. Department of the Navy, *Automated Ready Supply Store, Shop Store, and SERVMART Inventory Management System (ARSSIMS)*, FMSO Document Number UM-R01, 20 March 1995.
10. Meeting between LT Dowell and Mr. Ron Longueria, NPS Ready Supply Store Manager on 16 October 1996.
11. Meeting between LT Dowell and Ms. Kathy Moore, NPS Assistant Comptroller on 21 October 1996.
12. Telephone conversation between LT Dowell and Mr. Dave Tedrow, NPS Public Works Department on 01 November 1996.
13. Telephone conversation between LT Dowell and LT Al Pedraza, NPS Public Works Department on 01 November 1996.

14. Department of the Navy, *Small Purchase Procedures*, NAVSUPINST 4200.85C, ch. 6, 05 April 1996.

15. U. S. General Services Administration, *Governmentwide Commercial Credit Program*, Contract Guide GS-23F-94031, April 1994.

16. Phone conversation between LT Dowell Ms. Rene Robles, FISC Norfolk Systems Support Division, 23 October 1996.

INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center 2
8725 John K. Kingman Road., Ste 0944
Ft. Belvoir, VA 22060-6218

2. Dudley Knox Library 2
Naval Postgraduate School
411 Dyer Rd.
Monterey, CA 93943-5101

3. Defense Logistics Studies Information Exchange 1
U.S. Army Logistics Management College
Fort Lee, VA 23801-6043

4. Professor Kevin R. Gue, Code SM/GK 1
Department of Systems Management
Naval Postgraduate School
Monterey, CA 93943-5103

5. Professor Jane N. Feitler, Code SM/FJ 1
Department of Systems Management
Naval Postgraduate School
Monterey, CA 93943-5103

6. Naval Inventory Control Point 1
5450 Carlisle Pike
P.O. Box 2050
Mechanicsburg, PA 17055-0791
Attn: CDR Don Miller, Code 4111

7. Naval Inventory Control Point 1
5450 Carlisle Pike
P.O. Box 2020
Mechanicsburg, PA 17055-0788
Attn: Pete Hurst, Code 0133

8. Lieutenant Commander Barry J. Dowell 1
4604 Whispering Oaks Dr.
Charlotte, NC 28213